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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,785	11/20/2001	Tsuneyuki Kikuchi	070639-0136	9130
22428 7590 12/03/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER BATURAY, ALICIA	
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			2446	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/988,785

**Applicant(s)**

KIKUCHI, TSUNEYUKI

**Examiner**

Alicia Baturay

**Art Unit**

2446

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 90-92, 95, 97-100, 103, 105-108, 111 and 113 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 90-92, 95, 97-100, 103, 105-108, 111 and 113 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 20 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Office Action is in response to the amendment filed 02 September 2008.
2. Claims 1-89 were cancelled.
3. Claims 90-92, 95, 97-100, 103, 105-108, 111 and 113 were added.
4. Claims 90-92, 95, 97-100, 103, 105-108, 111 and 113 are pending in this Office Action.

***Response to Amendment***

5. The rejection is respectfully maintained as set forth in the last Office Action mailed on 09 January 2008. Applicant's arguments with respect to claims 90-92, 95, 97-100, 103, 105-108, 111 and 113 have been fully considered but they are not persuasive and the old rejection maintained.
6. ***Applicant Argues:*** Neither Rao nor Dougliis discloses or suggests determining whether to alter a statistic based at least partially on (i) a comparison of the first item of control information with an item of information related to a client terminal and (ii) a comparison of the second item of control with a particular item of information related to an application server.

***In Response:*** The examiner respectfully submits that the combination of Dougliis and Rao teaches determining whether to alter a statistic based (If the customer is willing to pay a premium to avoid this burden. The time-out policy may be made sensitive to customer specification that might even override the ISP's concerns. For example, a customer may

specify that when the customer is calling from a long distance that the ISP should disconnect more quickly than otherwise, even if the ISP has plenty of capacity – see Douglis, col. 3, line 57 – col. 4, line 46) at least partially on (i) a comparison of the first item of control information (Source address – see Rao, col. 9, lines 30-43) with an item of information related to a client terminal (The identity of the user who is currently using modem 20-i. Different thresholds can be applied for different users – see Douglis, col. 4, lines 19-22) and (ii) a comparison of the second item of control (Destination address – see Rao, col. 9, lines 30-43) with a particular item of information related to an application server (Each of the ISP modems maintains an associated timeout threshold – see Douglis, col. 3, lines 6-9). This renders the rejection proper, and thus the rejection stands.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
8. Claims 90-92, 95, 97-100, 103, 105-108, 111 and 113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglis et al. (U.S. 6,487,596) and further in view of Rao et al. (U.S. 6,674,756).

Douglis teaches the invention substantially as claimed including in an arrangement where users are connected to an ISP through a bank of modems, a time-out threshold is then selected for the user based on the user's connection pattern. The threshold is varied dynamically in response to access patterns, in an attempt to trade the benefit accrued by using the ISP's modem and phone line for a shorter period of time, against the inconvenience to the user from having to reestablish a connection to the ISP. Specifically, the time interval between the last disconnection by the user and the time of reconnection is evaluated, and when this time interval is shorter than a preselected threshold, then the time-out threshold is increased. When this time interval is longer than the preselected threshold, then the time-out threshold is decreased. Typically, when the time-out threshold is decreased, it is decreased by a significantly smaller amount than the amount by which it is increased, when it is increased (see Abstract).

9. With respect to claims 90, 98 and 106, Douglis teaches a server for communicating packets between a plurality of client terminals and a plurality of application servers, the server comprising: a decider configured to determine whether to alter a statistic based (Douglis, col. 3, line 57 – col. 4, line 46) at least partially on (i) a comparison with an item of information related to a client terminal (Douglis, col. 4, lines 19-22) and (ii) a comparison with a particular item of information related to an application server (Douglis, col. 3, lines 6-9), said decider configured to alter the statistic in a case where it is determined to alter the statistic (Douglis, col. 3, line 57 – col. 4, line 13), said decider configured to decide whether to disconnect the client terminal from the server in a case where the client terminal is

connected to the server based at least partially on a comparison of the statistic with a value of a disconnection condition parameter specified for the client terminal (Dougliš, col. 4, lines 1-22); and a disconnecter configured to disconnect the client terminal from the server in a case where it is decided by the decider to disconnect the client terminal from the server (Dougliš, col. 3, lines 6-9).

Dougliš does not explicitly teach a first and second item of control information from a packet.

However, Rao teaches a monitor configured to obtain at least a first item of control information and a second item of control information from a packet received by the server; the first item of control information; and the second item of control information (Rao, col. 9, lines 30-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dougliš in view of Rao in order to enable using a first and second item of control information from a packet. One would be motivated to do so in order to fulfill a need for a network switch capable of providing fault-tolerant and efficient services that will accommodate the increase in the number and the variety of network traffic.

10. With respect to claims 91, 99 and 107, Dougliš teaches the invention described in claims 90, 98 and 106, including a server for communicating packets between a plurality of client terminals and a plurality of application servers, the server comprising: a decider configured to determine whether to alter a statistic based (Dougliš, col. 3, line 57 – col. 4, line 13) at least partially on (i) a comparison with an item of information related to a client terminal

(Dougliš, col. 4, lines 19-22) and (ii) a comparison with a particular item of information related to an application server (Dougliš, col. 3, lines 6-9), said decider configured to alter the statistic in a case where it is determined to alter the statistic (Dougliš, col. 3, line 57 – col. 4, line 13), said decider configured to decide whether to disconnect the client terminal from the server in a case where the client terminal is connected to the server based at least partially on a comparison of the statistic with a value of a disconnection condition parameter specified for the client terminal (Dougliš, col. 4, lines 1-22); and a disconnecter configured to disconnect the client terminal from the server in a case where it is decided by the decider to disconnect the client terminal from the server (Dougliš, col. 3, lines 6-9).

Dougliš does not explicitly teach a first and second item of control information from a packet.

However, Rao teaches a monitor configured to obtain at least a first item of control information and a second item of control information from a packet received by the server; the first item of control information; and the second item of control information and the server wherein the first item of control information is a transmission address of the packet; and the second item of control information is a destination packet (Rao, col. 9, lines 30-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dougliš in view of Rao in order to enable using a first and second item of control information from a packet. One would be motivated to do so in order to fulfill a need for a network switch capable of providing fault-tolerant and efficient services that will accommodate the increase in the number and the variety of network traffic.

11. With respect to claim 92, 100 and 108, Douglis teaches the invention described in claims 91, 99 and 107, including a server for communicating packets between a plurality of client terminals and a plurality of application servers, the server comprising: a decider configured to determine whether to alter a statistic based (Dougkis, col. 3, line 57 – col. 4, line 13) at least partially on (i) a comparison with an item of information related to a client terminal (Dougkis, col. 4, lines 19-22) and (ii) a comparison with a particular item of information related to an application server (Dougkis, col. 3, lines 6-9), said decider configured to alter the statistic in a case where it is determined to alter the statistic (Dougkis, col. 3, line 57 – col. 4, line 13), said decider configured to decide whether to disconnect the client terminal from the server in a case where the client terminal is connected to the server based at least partially on a comparison of the statistic with a value of a disconnection condition parameter specified for the client terminal (Dougkis, col. 4, lines 1-22); a disconnector configured to disconnect the client terminal from the server in a case where it is decided by the decider to disconnect the client terminal from the server (Dougkis, col. 3, lines 6-9); the server wherein the disconnection condition parameter is a non-communication time period parameter (Dougkis, col. 3, lines 6-9); wherein the statistic is a time period that has elapsed since the reception of any packet by the server with the transmission address and the destination address (Dougkis, col. 3, lines 50-56); and wherein the decider is configured to alter the statistic by resetting the statistic to a starting value in the case where it is determined to alter the statistic (Dougkis, col. 3, line 57 – col. 4, line 13).

Dougkis does not explicitly teach a first and second item of control information from a packet.



However, Rao teaches a monitor configured to obtain at least a first item of control information and a second item of control information from a packet received by the server; the first item of control information; and the second item of control information; and wherein the item of information related to the client terminal is a terminal address of the client terminal; wherein the particular item of information related to the application server is an address of the application server (Rao, col. 9, lines 30-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dougkis in view of Rao in order to enable using a first and second item of control information from a packet. One would be motivated to do so in order to fulfill a need for a network switch capable of providing fault-tolerant and efficient services that will accommodate the increase in the number and the variety of network traffic.

12. With respect to claims 95, 103 and 111, Dougkis teaches the invention described in claims 90, 98 and 106, including a server for communicating packets between a plurality of client terminals and a plurality of application servers, the server comprising: a decider configured to determine whether to alter a statistic based (Dougkis, col. 3, line 57 – col. 4, line 13) at least partially on (i) a comparison with an item of information related to a client terminal (Dougkis, col. 4, lines 19-22) and (ii) a comparison with a particular item of information related to an application server (Dougkis, col. 3, lines 6-9), said decider configured to alter the statistic in a case where it is determined to alter the statistic (Dougkis, col. 3, line 57 – col. 4, line 13), said decider configured to decide whether to disconnect the client terminal from the server in a case where the client terminal is connected to the server based at least partially

on a comparison of the statistic with a value of a disconnection condition parameter specified for the client terminal (Dougliš, col. 4, lines 1-22); and a disconnecter configured to disconnect the client terminal from the server in a case where it is decided by the decider to disconnect the client terminal from the server (Dougliš, col. 3, lines 6-9).

Dougliš does not explicitly teach a first and second item of control information from a packet.

However, Rao teaches a monitor configured to obtain at least a first item of control information and a second item of control information from a packet received by the server; the first item of control information; and the second item of control information and the server wherein the first item of control is a service identifier; and wherein the second item of control is a destination address of the packet (Rao, col. 9, lines 30-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dougliš in view of Rao in order to enable using a first and second item of control information from a packet. One would be motivated to do so in order to fulfill a need for a network switch capable of providing fault-tolerant and efficient services that will accommodate the increase in the number and the variety of network traffic.

13. With respect to claim 97, 105 and 113, Dougliš teaches the invention described in claims 90, 98 and 106, including a server for communicating packets between a plurality of client terminals and a plurality of application servers, the server comprising: a decider configured to determine whether to alter a statistic based (Dougliš, col. 3, line 57 – col. 4, line 13) at least partially on (i) a comparison with an item of information related to a client terminal

(Dougkis, col. 4, lines 19-22) and (ii) a comparison with a particular item of information related to an application server (Dougkis, col. 3, lines 6-9), said decider configured to alter the statistic in a case where it is determined to alter the statistic (Dougkis, col. 3, line 57 – col. 4, line 13), said decider configured to decide whether to disconnect the client terminal from the server in a case where the client terminal is connected to the server based at least partially on a comparison of the statistic with a value of a disconnection condition parameter specified for the client terminal (Dougkis, col. 4, lines 1-22); a disconnector configured to disconnect the client terminal from the server in a case where it is decided by the decider to disconnect the client terminal from the server (Dougkis, col. 3, lines 6-9); the server said decider configured to determine whether to alter the statistic based (Dougkis, col. 3, line 57 – col. 4, line 13) further on (i) a comparison with the particular item of information related to the application server (Dougkis, col. 3, lines 6-9) and (ii) a comparison with the item of information related to the client terminal (Dougkis, col. 4, lines 19-22).

Dougkis does not explicitly teach a first and second item of control information from a packet.

However, Rao teaches a monitor configured to obtain at least a first item of control information and a second item of control information from a packet received by the server; the first item of control information; and the second item of control information (Rao, col. 9, lines 30-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dougkis in view of Rao in order to enable using a first and second item of control information from a packet. One would be motivated to do so in order to fulfill a

need for a network switch capable of providing fault-tolerant and efficient services that will accommodate the increase in the number and the variety of network traffic.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay  
December 3, 2008  
/Jeffrey Pwu/  
Supervisory Patent Examiner, Art Unit 2446